The listing of claims will replace all prior versions, and listings, of claims in the application. Please amend claims 53 and 66 as follows.

## **Listing of Claims:**

Claims 1-52 (canceled).

Claim 53 (currently amended): A single chain class II MHC molecule comprising:

a peptide-binding groove and

covalently linked in sequence: 1) a class II  $\beta$  chain, 2) a single chain linker, and 3) a class II  $\alpha$  chain,

wherein the chain of both 1) and 3) lack a transmembrane domain—and

the chain of both 1) and 3) are truncated compared to its respective full length chain.

Claim 54 (previously added): The MHC molecule of claim 53, wherein the MHC molecule is soluble.

Claim 55 (previously amended): The MHC molecule of claim 53, wherein the chain of 1) comprises a  $\beta$ 1 domain and the chain of 3) comprises an  $\alpha$ 1 domain.

Claim 56 (cancelled).

Claim 57 (previously amended): The MHC molecule of claim 53, wherein the single chain linker is linked between the carboxyl terminus of the  $\beta$  chain and the amino terminus of the  $\alpha$  chain.

Claim 58 (previously amended): The MHC molecule of claim 53, wherein the  $\beta$  and  $\alpha$  chains are each independently selected from the group consisting of IE, IA, DR, DQ and DP proteins.

Claim 59 (previously amended): The MHC molecule of claim 53 further comprising a presenting peptide non-covalently linked to a peptide binding groove of the MHC molecule.

Claim 60 (previously amended): The MHC molecule of claim 53 wherein the MHC molecule is modified to carry a detectable tag.

Claim 61 (previously amended): A multivalent MHC complex comprising two or more linked MHC molecules of claim 53.

Claim 62 (previously amended): A MHC complex of claim 61 wherein the MHC molecules are linked to immunoglobulin domains.

Claim 63 (previously amended): A MHC complex of claim 61 wherein the MHC complex is modified to carry a detectable tag.

Claims 64-65 (cancelled).

Claim 66 (currently amended): A single chain MHC class II-peptide complex comprising: a peptide-binding groove;

covalently linked in sequence: 1) a class II  $\beta$  chain, 2) a single chain linker, and 3) a class II  $\alpha$  chain, wherein the chain of both 1) and 3) lack a transmembrane domain and the chain of both 1) and 3) are truncated compared to its respective full length chain; and a presenting peptide being covalently linked to the MHC molecule.

Claim 67 (previously amended): The MHC complex of claim 66, wherein the complex is soluble.

P. Rhode et al. U.S.S.N. 09/848,164 Page 4

Claim 68 (currently amended): The MHC complex of claim 66, wherein the chains of 1) and 3) comprise a  $\beta$ 1 domain and  $\alpha$ 1 domain, respectively.

Claim 69 (previously amended): The MHC complex of claim 66, wherein the MHC class II molecule comprises the presenting peptide covalently linked to the  $\beta$  chain.

Claim 70 (cancelled).

Claim 71 (previously amended): The MHC complex of claim 66, wherein a presenting peptide linker sequence is interposed between the presenting peptide and the MHC molecule.

Claim 72 (previously amended): The MHC complex of claim 66, wherein the  $\beta$  and  $\alpha$  chains are each independently selected from the group consisting of IE, IA, DR, DQ and DP proteins.

Claim 73 (previously amended): The MHC complex of claim 66, wherein the MHC molecule is modified to carry a detectable tag.

Claim 74 (previously amended): A multivalent MHC complex comprising two or more linked MHC molecules of claim 66.

Claim 75 (previously amended): The MHC complex of claim 74, wherein the MHC molecules are linked to immunoglobulin domains.

Claim 76 (previously amended): The MHC complex of claim 74, wherein the MHC complex is modified to carry a detectable tag.

Claims 77-87 (cancelled).